Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (currently amended) An information processing device comprising:

a receiving component receiving information elements contained in respective information sets having one or more information elements, from one or a plurality of information set sources issuing said information sets;

an information processing component carrying out processing of said information elements thus received; and

a determining component determining a processing sequence for said two or more information sets or said plurality of information elements, on the basis of the plurality of information elements that are unprocessed or currently being processed, contained in two or more information sets thus received, and determining a processing sequence different from [[the]] a reception sequence, in which a value relating to the average of the length of processing time for said two or more information sets becomes equal to or less than the value that would be obtained were said plurality of information elements or said two or more information sets to be processed in accordance with [[their]] the reception sequence thereof;

wherein said information processing component starts processing of the plurality of information elements that are unprocessed or currently being processed, on the basis of the processing sequence thus determined.

2. (original) The information processing device according to claim 1, wherein said determining component acquires expected values relating to the length of time that processing is expected to take, for respective said two or more information sets, on the basis of said plurality of information elements, and determines said processing sequence on the basis of the expected values thus acquired.

3. (original) The information processing device according to claim 2, further comprising:

a subsidiary expected value storing component storing subsidiary expected value information indicating subsidiary expected values relating to the length of time that processing is expected to take for information elements having certain information element attributes, for each of a plurality of information element attributes relating to the information elements;

wherein said determining component acquires said subsidiary expected values for each of said plurality of information elements, on the basis of the respective information element attributes of said plurality of information elements and said stored subsidiary expected value information, and acquires said expected values for each of said two or more information sets, by using the subsidiary expected values thus acquired.

4. (original) The information processing device according to claim 3, wherein said determining component determines said processing sequence, in which processing is carried out in sequence starting from the information element or information set having the smallest subsidiary expected value thus acquired.

5. (original) The information processing device according to claim 2, wherein said determining component acquires said expected values for each of said two or more information sets, on the basis of the attributes of information elements processed in the past by said information processing component, and information relating to the history of the length of time taken to process those information elements.

6. (original) The information processing device according to claim 1, wherein said determining component determines said processing sequence, in which the smallest value is obtained of the plurality of values relating to said average corresponding respectively to a plurality of said processing sequences for said plurality of information elements.

7. (original) The information processing device according to claim 1, wherein said determining component acquires the differential between the smallest and largest value of said processing time lengths, for said two or more information sets, and executes processing for determining said processing sequence if said differential is equal to or greater than a prescribed value.

8. (original) The information processing device according to claim 1, wherein, if said plurality of information elements include an information element that is being processed by said information processing component, then said determining component determines said processing sequence on the basis of the remaining length of time of the processing time taken to process the information element.

9. (original) The information processing device according to claim 1, further comprising a completion signal transmitting component transmitting a completion signal indicating that processing has been completed, to the information set source that issued an information set, when processing for the information set has been completed;

wherein said length of processing time for said information set is a length of time relating to the response time from the issuing of said information set by said information set source until the reception of said completion signal by same.

10. (currently amended) The information processing device according to claim 1, wherein said determining component executes processing for determining said processing sequence, in cases where [[the]] a reception status of said received two or more information sets is a prescribed status.

11. (original) The information processing device according to claim 1, wherein said determining component identifies the elapsed length of time from the start of processing for said information set or said information element, until a prescribed time, and executes processing for determining said processing sequence, if said elapsed length of time has exceeded a prescribed length of time.

12. (currently amended) A storage control apparatus comprising:

a storage control device capable of connecting to one or a plurality of physical or logical storage devices;

a receiving component receiving information elements contained in respective I/O requests having one or more information elements, from one or a plurality of I/O request sources issuing said I/O requests;

an information processing component carrying out processing for reading data from said storage device and transmitting same to the I/O request source, or writing data from said I/O request source to said storage device, on the basis of the information elements contained in said I/O request thus received; and

a determining component determining a processing sequence for said two or more I/O requests or said plurality of information elements, on the basis of the plurality of information elements that are unprocessed or currently being processed, contained in two or more I/O requests thus received, and determining a processing sequence different from [[the]] a reception sequence, in which a value relating to the average of the response time for said two or more I/O requests becomes equal to or less than the value that would be obtained were said plurality of information elements or said two or more I/O requests to be processed according to [[their]] the reception sequence thereof.

13. (currently amended) An information processing method comprising ~~the steps of~~:

receiving information elements contained in respective information sets having one or more information elements, from one or a plurality of information set sources issuing said information sets;

carrying out processing of said information elements thus received; and

determining a processing sequence for said two or more information sets or said plurality of information elements, on the basis of the plurality of information elements that are unprocessed or currently being processed, contained in two or more information sets thus received, and determining a processing sequence different from [[the]] a reception sequence, in which a value relating to the average of the response time for said two or more information sets becomes equal to or less than the value that would be obtained were said

plurality of information elements or said two or more information sets to be processed in accordance with [[their]] the reception sequence thereof;

wherein, in said processing [[step]] of said information elements, the processing of a plurality of information elements that are unprocessed or currently being processed is started on the basis of the element processing sequence thus determined.

14. (currently amended) A computer-readable storage medium having a computer program ~~for causing a computer to implement the steps of~~ comprising:

code for receiving information elements contained in respective information sets having one or more information elements, from one or a plurality of information set sources issuing said information sets;

code for carrying out processing of said information elements thus received; and

code for determining a processing sequence for said two or more information sets or said plurality of information elements, on the basis of the plurality of information elements that are unprocessed or currently being processed, contained in two or more information sets thus received, and determining a processing sequence different from [[the]] a reception sequence, in which a value relating to the average of the response time for said two or more information sets becomes equal to or less than the value that would be obtained were said plurality of information elements or said two or more information sets to be processed in accordance with [[their]] the reception sequence thereof;

wherein, in said processing [[step]] of said information elements, the processing of a plurality of information elements that are unprocessed or currently being processed is started on the basis of the element processing sequence thus determined.

15. (new) The information processing method according to claim 13, wherein said determining comprises acquiring expected values relating to the length of time that processing is expected to take, for respective said two or more information sets, on the basis of said plurality of information elements, and determining said processing sequence on the basis of the expected values thus acquired.

16. (new) The information processing method according to claim 15, further comprising:

storing component storing subsidiary expected value information indicating subsidiary expected values relating to the length of time that processing is expected to take for information elements having certain information element attributes, for each of a plurality of information element attributes relating to the information elements;

wherein said determining comprises acquiring said subsidiary expected values for each of said plurality of information elements, on the basis of the respective information element attributes of said plurality of information elements and said stored subsidiary expected value information, and acquiring said expected values for each of said two or more information sets, by using the subsidiary expected values thus acquired.

17. (new) The information processing method according to claim 16, wherein said determining comprises determining said processing sequence, in which processing is carried out in sequence starting from the information element or information set having the smallest subsidiary expected value thus acquired.

18. (new) The information processing method according to claim 15, wherein said determining comprises acquiring said expected values for each of said two or more information sets, on the basis of the attributes of information elements processed in the past by said information processing component, and information relating to the history of the length of time taken to process those information elements.

19. (new) The information processing method according to claim 13, wherein said determining comprises determining said processing sequence, in which the smallest value is obtained of the plurality of values relating to said average corresponding respectively to a plurality of said processing sequences for said plurality of information elements.

20. (new) The information processing method according to claim 13, wherein said determining comprises acquiring the differential between the smallest and largest value of said processing time lengths, for said two or more information sets, and executing processing for determining said processing sequence if said differential is equal to or greater than a prescribed value.